

4.6 SERVICES

This section identifies potential impacts on the provision of services within Ames Research Center from each of the five alternatives, and proposes mitigation measures to reduce or eliminate identified impacts.

A. Standards of Significance

An alternative for the NASA Ames Development Plan (NADP) would have a significant impact with regard to the provision of services if it would:

- Create a demand for solid waste disposal that exceeds the capacity of the landfill site currently used for Ames Research Center's waste products.
- Exceed the student capacity of existing schools.
- Create a demand for police or fire services that cannot be met using NASA's resources.

B. Impact Discussion

Under Alternatives 2 through 5, the baseline population of Ames Research Center and the square footage of facilities would be expected to increase. The increase in population would vary from a low of 1,267 new residents under Alternative 3 to a high of 2,808 new residents under Alternative 5. The increase in employment would vary from a low of 7,222 new employees under Alternative 5 to a high of 15,599 new employees under Alternative 4. Similarly, the amount of net new development would vary among the five alternatives from a low of approximately 280,000 new square meters (3.0 million new square feet) under Alternative 3 to a high of approximately 455,000 new square meters (5.0 million new square feet) under Alternative 4. This section describes potential impacts from the potential increases in population and building square footage on the provision of basic services at Ames Research Center.

1. Fire

As described in Section 3.6, above, fire protection at Ames Research Center is provided by NASA and supplemented by the Santa Clara County Fire Mutual Aid service. Existing levels of fire protection would not be adequate to support the increase in population and square footage proposed under the action alternatives. However, NASA has committed to increasing the number of personnel and amount of equipment available for emergency fire response at Ames Research Center to the levels required to serve development under the NADP, which would prevent a potential impact.

Since there would be no demands on outside fire services, there would also be no potential for the NADP to combine with cumulative projects to create cumulative fire service impacts.

2. Police

Security services at Ames Research Center are provided by the ARC Protective Services Office, Security Services Branch. The Security Services Branch would continue to provide police services throughout Ames Research Center, and their patrols would be increased as necessary to serve new development under the NADP. The Security Services Branch would not provide internal security for non-federal entities, however, so the university, non-profit, and private groups moving into Ames Research Center would be responsible for establishing their own internal security service.

Current levels of security are not sufficient to provide coverage for the expanded population foreseen under the NADP. However, NASA foresees no problems in expanding services to the needed levels. No demands on city or county police services would occur.

Since there would be no demands on outside police services, there would also be no potential for the NADP to combine with cumulative projects to create cumulative police service impacts.

3. Solid Waste

Using the population numbers from Alternative 5 and employment numbers from Alternative 4 in order to conduct a conservative analysis of solid waste impacts under the NADP, the amount of new waste generated would be approximately 6 million kilograms (6,600 tons per year).¹ This would increase to 6,331 tonnes (6,950 tons) per year under Mitigated Alternative 5.² This estimate is based on assumptions of 2.0 kilograms (4.5 pounds) of waste per person per day in residential units, and 1.02 kilograms (2.25 pounds) of waste per employee per day. This would be a small fraction of the 820 million kilograms (900,000 tons) per year of waste that the Newby Island Landfill receives, and so would not significantly hasten the forecasted close of that landfill in 2020. Thus there would be no impact on regional solid waste disposal from implementation of the NADP.

The NASA Ames Research Center is committed to reducing the volume of solid and hazardous waste generated annually through source reduction and recycling. The current Agency-wide goal is to divert 35 percent of solid waste away from landfills by 2010 compared with the 1997 baseline. However, Ames is committed to a more aggressive program and has achieved a 63% diversion from landfill. Ames has also promulgated guidelines for the purchase of a variety of recycled contents materials from paper products to vehicular products. In addition, Ames has set up a complex system of accountability and reporting to ensure that at least the following items are being recycled wherever feasible: white paper, cardboard, scrap metal, wood and steel. Ames is also committed to purchasing products with recycled or recovered materials content in the percentages specified by the current Federal EPA Guidelines. These programs would further minimize solid waste impacts of the alternatives.

¹ Based on information provided by the Franklin Associates *Characterization of Municipal Solid Waste in the United States, 1998 Update*. July, 1999.

² See Section 5.6 for more details.

Some of the items ARC is currently recycling include white paper, mixed paper, cardboard, toner cartridges, various types of batteries, fluorescent lamps, certain solvents, waste oil, oil filters, scrap metal and empty drums, tires, and computers. Ames also realizes reductions in solid waste through reduced paper usage, which is achieved by double-sided printing and copying and by electronic distribution of documents. A benchmarking project recycling plastics, glass and aluminum cans is scheduled to begin in early 2002, followed by full implementation in 2003.³ Ames further reduces solid waste by composting or making into mulch all landscaping green waste. Ames keeps the mulch and compost on-site for further landscaping use. These programs would apply to all new development under the NADP.

Ames continues to find ways to reduce the solid waste that goes to landfill through the expansion of its recycling, composting and green purchasing programs. Continual improvements in these programs are expected to yield additional reductions in solid waste disposal.

Like the NADP, the cumulative projects listed in Chapter 2 would also generate additional solid waste, which would be sent to the Newby Island Landfill. Calculations of the projected closure date for this landfill include an allowance for cumulative projects listed in Chapter 2, so no additional impact from cumulative projects is expected.

4. Schools

Potential numbers of elementary and high school students in the proposed housing have been estimated using the number of new townhome and apartment units. As shown in Table 4.14-11 in Section 4.14, the number of students generated would range from a low of 40 K-8 students and 11 high school students under Alternative 3, to a high of 102 K-8 students and 28 high school students under Alternative 4. Alternative 4, the alternative that would

³ Diane Shelander, Ames Research Center, March 6, 2002.

generate the highest number of students, was used as the basis for this impacts analysis.

a. Mountain View and Whisman School Districts

As described in Section 3.6, above, children at Ames Research Center would attend school in the Mountain View-Whisman School District, which serves children from kindergarten through eighth grade. The surplus capacity in the Mountain View-Whisman School District as of Fall 2001 could accommodate 23 students. Although Mitigated Alternative 5 would exceed the District's surplus capacity by 125 students, development under the NADP would also pay school Developer Impact Fees that would be used by the Mountain View-Whisman School District to build new classrooms and other necessary facilities. As noted in Table 4.14-12, fees of \$541,000 to \$1.7 million would be expected under Alternatives 2, 4, 5 and Mitigated Alternative 5.

Table 4.6-1 contains a comparison of the additional facilities cost generated by the students in excess of the District's current capacity and the revenue from the Developer Impact Fee. The analysis uses Mitigated Alternative 5, the NADP alternative generating the greatest number of elementary students, as a basis for the comparison. According to this calculation, the Developer Impact Fee would generate a surplus of \$11,710 above the facilities cost. Therefore, no significant impact would occur.

b. Mountain View-Los Altos Union High School District

High School-age students living at Ames Research Center would attend schools in the Mountain View-Los Altos Union High School District. As of October 2001, Los Altos High School was 121 students under capacity. This would allow more than enough space for the 11 to 40 high school students that the area would be expected from implementation of the NADP.

c. Cumulative Impacts

The cumulative projects identified in Chapter 2 are primarily employment generating, with relatively few residential projects. The cumulative projects

TABLE 4.6-1 **MOUNTAIN VIEW-WHISMAN SCHOOL DISTRICT FACILITIES
IMPACT ESTIMATE**

ADDITIONAL STUDENTS		Students	Classrooms (a)
Projected Additional Mountain View-Whisman School District Students (b) (Net of current excess capacity in the District)		125	7
FACILITY COSTS PER ADDITIONAL CLASSROOM (c)			
Classrooms		\$160,000	
Core Facilities		\$57,600	
Restroom Facilities		\$24,000	
Total		\$241,600	
FACILITIES IMPACT			
NADP Developer Impact Fee (d)	\$1,702,910		
Additional Facilities Cost	\$1,691,200		
Surplus/(Deficit)	\$11,710		

Notes:

(a) Students per classroom: 19.8 Based on the average classroom size in Mountain View School District in 1999. Number of classrooms rounded up to nearest whole number.

(b) Mitigated Alternative 5 generates the greatest number of elementary students at 148. As of Fall 2001, the District had excess capacity for 23 students.

(c) Cost assumptions from Mountain View School District Developer Impact Fee Justification Study, 1999. Assumes additional classrooms will be built on existing school property due to high cost and low availability of land in Mountain View. Cost of additional classrooms assumes half are permanent and half are portable, per Mountain View School District Developer Impact Fee Justification Study, 1999.

(d) From Table 4.14-12. Developer Impact Fee generated by Mitigated Alternative 5.

Source: Schoolhouse Services; Mountain View-Whisman School District; Bay Area Economics, 2002.

include 275 additional residential units in Mountain View, which would generate 36 elementary school students and 10 high school students.

These additional elementary school students from cumulative projects exceed the current capacity of the Mountain View-Whisman School District. This impact would be mitigated through the payment of standard developer impact fees by both residential and commercial development.

The additional high school students from cumulative projects could be accommodated in the Mountain View-Los Altos Union High School District.

C. Impacts and Mitigation Measures

This section summarizes significant impacts identified in Section B, and proposes mitigation measures for each identified impact.

Impact SERV-1: Under Alternatives 2, 4 and 5, and Mitigated Alternative 5, housing development in the Bay View Area would result in an increase in elementary school students that would impact the Mountain View-Whisman School District.

Applicable to: Alternatives 2, 4, 5 and Mitigated Alternative 5

Mitigation Measure SERV-1: The NADP housing developers would pay the standard Developer Impact Fees to the Mountain View-Whisman School District.

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ENVIRONMENTAL CONSEQUENCES: SERVICES